



STB20N65M5, STI20N65M5, STP20N65M5, STW20N65M5

N-channel 650 V, 0.160 Ω typ., 18 A MDmesh™ V Power MOSFET
in D²PAK, I²PAK, TO-220 and TO-247 packages

Datasheet — production data

Features

Order codes	V _{DS} @ T _{Jmax}	R _{DS(on)} max	I _D
STB20N65M5	710 V	0.19 Ω	18 A
STI20N65M5			
STP20N65M5			
STW20N65M5			

- Worldwide best R_{DS(on)} * area
- Higher V_{DSS} rating and high dv/dt capability
- Excellent switching performance
- 100% avalanche tested

Applications

- Switching applications

Description

These devices are N-channel MDmesh™ V Power MOSFETs based on an innovative proprietary vertical process technology, which is combined with STMicroelectronics' well-known PowerMESH™ horizontal layout structure. The resulting product has extremely low on-resistance, which is unmatched among silicon-based Power MOSFETs, making it especially suitable for applications which require superior power density and outstanding efficiency.

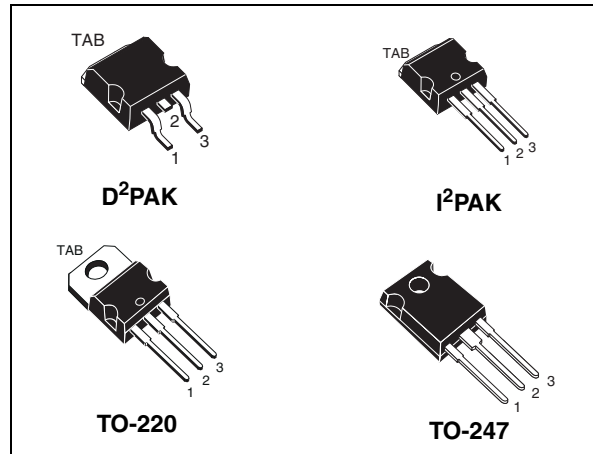


Figure 1. Internal schematic diagram

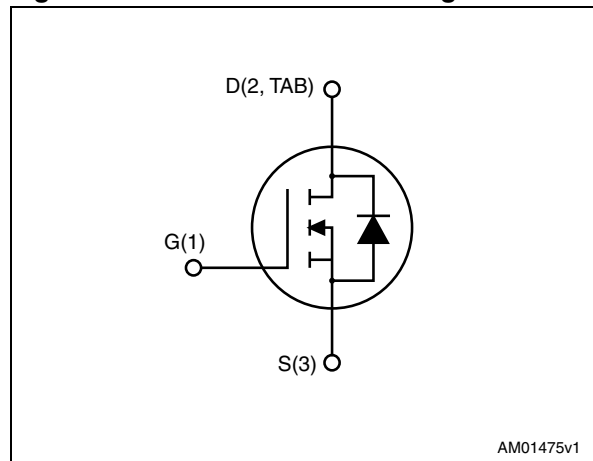


Table 1. Device summary

Order codes	Marking	Package	Packaging
STB20N65M5	20N65M5	D ² PAK	Tape and reel
STI20N65M5		I ² PAK	Tube
STP20N65M5		TO-220	
STW20N65M5		TO-247	